

# **Implementation of Career Exploration For Middle School Students**

## **Summary**

The Career Exploration for Middle School Curriculum Framework Update project was recently completed with input from a Design Team and External Review Team including middle and high school educators, counselors and administrators; post secondary educators and counselors; industry representatives and Arizona Department of Education Representatives. To assist with the next steps of implementation this position paper is offered. Input for this document has been gathered from numerous research documents and from responses from Design Team members who were asked for their views on the importance or value of such a program being required for all middle school students.

The research and team feedback definitely supports the implementation of a required course of study in career exploration for middle school students. Some locations cited in this paper have been successfully implementing programs for years. Participants in the framework update project expressed support for a required course and also expressed some concern with the difficulty fitting this within the middle school curriculum schedule since there are so few electives currently available that this program could replace. The question expressed by more than one educator is, "What will be eliminated?"

## **Review of Studies of Middle School Career Intervention Programs**

Several case studies show that there is a clear benefit to implementing comprehensive and extensive career exploration programs at the middle school level. Throughout the last decade, researchers have recommended that career exploration and awareness begin before high school, when students have already made major decisions about courses (Castellano et. al, 2002; Fouad, 1995; O'Brien, et. al, 1999; Toepfer Jr., C.F., 1994). In many cases, students passively follow career paths simply by not choosing from their high school curriculum options the courses needed for technical or other careers. To encourage students to make informed decisions, middle schools must introduce career awareness, such as the concept that success in most careers requires education and training (Fouad, 1995). As the National Alliance of Business recommended in its 1999 publication *Preparing Young People for Tomorrow's Workplace*, "Middle school is an ideal age at which to expose students to the challenging world of work" (p.5).

In their article *Broadening Career Horizons for Students in At-Risk Environments*, O'Brien et al. (1999) state that "Few middle schools adequately address the career development of students in at-risk environments despite evidence to indicate that interventions can enhance academic performance, facilitate high school completion, and encourage postsecondary education" (p.216). Because students who drop out of high school often begin to disconnect in middle school or earlier, interventions that give the school experience focus and meaning are critical (Castellano et al., 2002).

Elements of successful career awareness programs have been described in numerous publications (Kerka, 2000; Maddy-Bernstein, 1997; Toepfer, 1997; Toepfer, 1994). Interest inventories and aptitude tests, field trips, Career Days, and community partnerships are among the tools that can increase students' awareness of their own interests and help them learn about a wide variety of occupations (Hogan, 1995). As students gain understanding of the preparation needed for specific careers, they may begin to consider the role that postsecondary education and training could play in their futures.

Glasgow Middle School in Fairfax County, Virginia has been implementing these recommendations with funding from a US Department of Education GEAR-UP (Gaining Early Awareness and Readiness for Undergraduate Programs) grant.

Another program of particular interest is the state of Ohio which starts its career development in very early grade levels and requires students to develop an Individual Career Plan, as is proposed in the new Career Competencies for Arizona.

Empirical studies that show positive results of career development programs are also included in this review. Most of these effects center on improved knowledge of career options, change in attitude towards careers and academic achievement, improved academic achievement, and the ability to formulate clear career goals and planning.

### **Glasgow Middle School in Fairfax County, Virginia**

The US Department of Education GEAR-UP program aims to increase the number of low-income students prepared to enter postsecondary education (U.S. Department of Education, 2002). Glasgow has a large population of at-risk students, including many English language learners. A key component of the Glasgow Middle School program focuses on career awareness.

All 6th, 7th and 8th graders complete computer-based interest inventories. Career inventories help students articulate their interests and identify matching careers. Working with these self-assessment tools is an important early step in career awareness. Glasgow uses CX Online and Choices software from Bridges, Inc. The programs prompt students to answer questions about their interests, then offers career ideas. Next, students research one occupation to determine the training and education required and the salary range. Use of the software occurs in the context of a lesson describing education options (two-year college, four-year college, advanced degree, military training, apprenticeships, and other on-the-job training) and an explanation that postsecondary education is available and affordable for all.

Articulated lesson plans from Career Connections Across the Curriculum for Middle School Students (Fairfax County Public Schools, 2001) have been implemented at each grade level. Additional units have also been developed as needed. For 6th graders, activities include general discussions and completion of the CX Online Career Finder inventory, followed by research on specific careers. Seventh graders complete personal timelines and occupational family trees. Eighth graders have worked on electronic budgeting programs; given themselves "performance evaluations"; viewed videos about work habits; and learned how to search for part-time jobs. Both 7th and 8th grade classes have researched jobs using online newspaper classified ads at [www.washingtonpost.com](http://www.washingtonpost.com), [www.nytimes.com](http://www.nytimes.com), and other sites.

To help them connect the subjects they study to the workplace, students learn about careers in areas such as science, math, social studies, foreign language, art, and music. A typical lesson begins with a brainstorming activity in which students suggest careers in the subject area. Next, the Career Specialist makes additional suggestions and describes the education and training needed for various careers. Lessons conclude with students researching one or more careers.

Career Days, career assemblies, community partnerships, college planning workshops and college visits have been part of the program. By helping middle school students visualize the college experience, GEAR-UP Glasgow helps them see themselves as college bound. The experiences have left many students considering a future that includes postsecondary education.

To help our many at-risk students relate academic achievement to success at work, GEAR-UP Glasgow has implemented recommendations made by career education experts. Students have responded enthusiastically to the initiatives undertaken thus far, completing career inventory programs; learning about careers in subject areas; attending Career Days and assemblies; job shadowing; visiting colleges; and using career resources at the school Web site. Through mailings and workshops, GEAR-UP Glasgow also reaches out to the parents who are such a critical part of its mission.

Many resources exist to help middle schools implement these and other programs. While financial considerations may limit the size and scope of the initiatives undertaken, career awareness experiences are essential for students to learn

the skills they need to succeed in the 21st century. Virginia continues to offer the GEAR-UP program and offers the following student testimonials to support the effort's success:

**A West Virginia GEAR UP student:** During college visits last year, one of our severely at-risk students, a child who never paid attention or showed any interest in anything other than how to get kicked out of class, was absolutely enthralled with the college experience. Not only was he well-behaved, but his comment was, "Wow, I want to go here." Any spark of interest from this child was an improvement. I checked his progress today and was told that he is a different child and that he has been no trouble. Apparently, he has a goal now, a focus.

**Another West Virginia GEAR UP student:** I never actually thought much about my future after high school, but you've made me realize that it's so much closer than it really seems. . . . The GEAR UP program somehow started the very year I began the 7th grade. So I'm one of the lucky students who gets to benefit from it throughout my education. Basically, I just wanted to let you know that what you're doing is a wonderful thing, and I, along with many other students, am glad you've taken on the responsibility to carry it through.

## Ohio

Since 1971 Ohio has had a statewide career intervention program which today consists of development of an Individual Career Plan and Career Passport, a formal document that students are encouraged to use in the job seeking process. The career development process is initiated in kindergarten and the ICP is created in 8<sup>th</sup> grade, then reviewed annually through high school.

In the 8<sup>th</sup> grade students identify the educational requirements to meet their goals. The program focuses on self-assessment, self-knowledge, attaining career information in order to evaluate career options, as well as employability skills.

Ohio states that the ICP represents a pivotal point in a student's career decision-making process. It is a planning document initiated by the student, and it includes components such as: a career skills checklist, and documentation of actual work experience and community involvement experiences. The ICP also includes activities related to SCANS (U.S. Department of Labor, 1991). The entire ICP document is completed by and reflects the thoughts of the student.

Ohio research shows that, between grades 8 and 11, about 50% of students change their career goals. The students are encouraged to review their ICP annually through high school, and to further explore and re-evaluate their career goals. As part of the ICP process Ohio requires a career interest assessment in 8<sup>th</sup> grade, and again in high school.

The ICP and Career Passport programs are deemed successful by the state. Parents have been pleased with the documents, and the Career Passport documents have received positive feedback from employers. All the higher education institutions in Ohio have been made aware of the Career Passport documents and the Ohio Department of Education has requested that they ask for it when working with students entering their programs.

To measure the success of the states career development program, Ohio designed a core standard and performance measure that has been in place since 1994. Through an interval sample process, 2% of the state's students in grades 8, 10, and 12 are interviewed each year. Students are asked three questions: What is (are) your career goal(s)? What courses or classes do you plan to take in high school to reach the goal(s)? What do you plan to do after high school to reach the goal(s)? The responses to the last two questions must be appropriate for the student's career goal.

It was expected that at least 75% of students in grades 8, 10, and 12 would be able to articulate career goals and appropriate educational paths to reach those goals. Statewide, in 1998, 87% of students in grade 8 responded appropriately, that is, their responses met the above criteria. Eighty-eight percent of students in grade 10 and 91% of students in grade 12 responded appropriately. Findings also indicated that more students with ICPs were able to articulate career goals, and that students felt that job-shadowing had the biggest impact on their career choices.

## Empirical Studies

**Hughes and Karp (2004) wrote a synthesis of the literature on School-Based development.** Below are some of the most relevant findings for implementation of the new Career Exploration standards for the state of Arizona:

- A year-long career course engaging middle school students in six-week units on various careers promoted both academic and career-related growth (Fouad, 1995). Students participating in the course:
  - increased their knowledge of careers, although the increase was predominantly among white students, rather than minority students;
  - increased their self-esteem;
  - were more likely to engage in careful academic planning (as evidenced by their enrollment in magnet high schools) than comparison group students; and
  - showed improved math and science grades, when compared to a control group.
  - Minority students who participated in the career course were more likely than minority students in the comparison group to enroll in algebra or higher-level math courses in high school; and
  - white male students participating in the career course were more likely than their peers in the comparison group to take advanced science courses in high school.
- High school students who took a career-decision making course had less career-related indecision at the end of the course than did a comparison group (Savickas, 1990). Participants also improved their long-term perspective as compared to the comparison group, meaning that the career course helped them understand the relationship between the present and the future, and to plan for and be motivated to achieve long-term goals.

Computer-assisted career guidance comes in many forms. These programs are used for self-assessment purposes, information access and retrieval, and to teach career decision-making processes. There has been considerable enthusiasm about such tools that can be self-administered, particularly in that they are less labor intensive for counselors, and allowing time for more face-to-face interaction with the student. Arizona Schools currently have access to the **Real Game** and there are studies that find that computer based career guidance indeed does have a positive effect on students.

- Middle school students participating in the **Real Game** (a series of role-playing activities) increased their knowledge of work and occupations, as compared to a group of students who did not participate (Killeen, Edwards, Barnes, & Watts, 1999).
- Middle-school students who worked with DISCOVER for one hour a day over a two-week period showed significant gains in career maturity, as measured by the Career Maturity Inventory's Attitude Scale, compared with a control group (Luzzo & Pierce, 1996).

Hughes and Karp (2004) conclude that students do seem to benefit, both vocationally and academically, from participation in career courses. In particular, they seem to increase their knowledge of careers and their ability to make career-related decisions. On most career-related measures, students did see increased outcomes when compared with students not enrolled in a career course.

***In Vocational Education in the Middle School***, Sandra Kerka states: Youth who are most likely to think about their future careers, and believe that they have a variety of career options, have high self-esteem and are able to understand and evaluate complex career information. They have families that help them learn about career choices and support their efforts, in school and outside, to prepare for a career.

Unfortunately, many youth have already limited their career aspirations by the time they reach middle school, based on false information and beliefs. For example, many boys may have sex-stereotyped views of occupations by the time they reach adolescence. Girls also acquire these views, but at a slightly older age.

**A literature review by Bluestein** (2004) cites meta-analyses that corroborate a positive link between career education and academic achievement. (Baker & Taylor, 1998; Evans & Burck, 1992).

**It has been argued that career education is linked to higher academic achievement** and Fouad (1995) found that students who took part in a one-year program designed to increase their awareness of math and science careers, demonstrated some gain in academic achievement. Another study (Lapan, Gysbers, and Petroski, 2001) found that 7<sup>th</sup> graders who participated in a comprehensive career guidance program displayed more positive attitudes about the importance of education, and achieved higher academic scores than students who did not participate in the program.

### **Design Team and External Team Comments**

Educators and Industry Representatives expressed support for implementation of a required Career Exploration Program for middle school students. Academic achievement was cited as the most important reason to require career exploration. Students often tell teachers they see no reason for taking certain courses, especially math. When they see the relevance to a job/career they are motivated to improve. One industry representative stated, “My son was a struggling math student in 7<sup>th</sup> grade and decided he wanted to become an architect. When he realized that having strong math skills would be required his grades went up from high B’s to strong A’s. Now he loves math.”

Another industry representative stated, “It’s a process and an evolution to career choices and never too early to thinking of what you want to be and how to prepare to “market” yourself.

Educators stressed the importance of assisting middle school students in developing skills that they will need to build on in high school. How to choose electives in high school will be easier with more preplanning in middle school. “Students rarely know about jobs other than what their family members do for work and what they see as “high School” jobs at McDonalds, movie theatres and grocery stores. Many have not experienced professional, technological or creative careers and have no idea of other career options,” states one educator.

Currently, guidance counselors are the main source for middle school students to receive career direction. As one educator notes, “I have seen students who do not take advantage of career guidance because of a number of reasons, such as a student who is on the honors tract, a student who changes schools frequently or a student who is involved with band and music programs....As a parent of two middle school students, a 6<sup>th</sup> grader and a 7<sup>th</sup> grader, exploring different careers early in their academic planning will assist them in which electives to explore at the high school level.”

One team member stated, “There are many jobs/careers that are changing so fast, that some areas of the job market have not even been “out there” long enough to have anything known about them. Students need to become aware of their own potential to be able to have a realistic view of what their future career may be like. There are so many students who are not cognizant of the world of work and many believe that Mom and/or Dad will support them into their 30’s Other students believe that earning the minimum wage (McDonalds) is sufficient to adequately survive.”

Knowing the reality of earning potential and the cost of living is a critical skill that can begin early. More than one educator stressed, “In reality, learning about the job market and career education is an essential part of teaching our children responsibility for becoming self-supporting members of society. Since students spend about a dozen years in school, yet have the potential to be working for possibly up to fifty years, it seems only prudent that we as educators provide the appropriate tools for teaching children about the world of work and careers ...as early as possible.”

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